

Using Canvas to Track Data and Improve Student Performance

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### **Capstone Project Proposal**

The capstone project will take place in the Cherokee County School District (CCSD) in Canton, GA. During the capstone, it will specifically focus on one of CCSD's Creekview Zone schools, Creekview High School, a suburban, public high school for 9th-12th-grade students, located in the northeastern part of Cherokee County (Merges, 2017). The following information regarding Creekview High School will be based on the 2015-2016 School Improvement Plan (SIP). Since Creekview High School's opening in 2005, the school has been recognized on the list of America's Most Challenging High Schools by the Washington Post, selected as one of Atlanta Magazine Top 20 High Schools, and Newsweek Magazine selected Creekview as a Top 1500 High Schools in America.

The student demographic is growing and change each school year. In 2015, 87% of the student's ethnic population was White, followed by 7% Hispanic, and 3% Black. Creekview High School has 15% of its students on free and reduced lunch (Thomason, 2015). The school's scores for the End of Course Test (EOC) in Algebra, Geometry, 9<sup>th</sup> Literature, American Literature, Biology, Physical Science, US History, and Economics are currently not available. Most of the 2016 graduating class continued their education at a four-year college or two-year/technical college, 3% went into the military, and 12% went into the workforce. According to the 2016-2017 Creekview High School Profile, Creekview has 152 faculty and staff members, of those, 34 % have a Master's degree, 17% have a Specialist degree, and 6% have a Doctorate degree (Merges, 2016). Creekview's teachers serve in a variety of departments. The following lists the departments and the number of teachers in each one: social studies (13), math (16), science (15), English (15), Career and Technical Education (12), Special Education (22) Fine Arts (4), PE/Health (7), and Languages (8) (Merges 2016). In the 2016-2017 school year,

Creekview transitioned under new leadership by gaining a new principal who is pushing for the use of more technology in the classroom. Currently, one of his initiatives includes having all teachers Microsoft Innovative Educator (MIE) certified like other schools in our county.

Our county is also in a transitional period as Cherokee County School District gained a new Superintendent of Schools for the first time in 18 years. Part of his and CCSD's mission is to educate the emerging generation. With this mission, CCSD is focusing on using technology to increase student achievement and trying to close the technology gap within the different schools in the county. Most of the schools within the district are MIE certified and are working towards other technology geared certifications. The county has also adopted a new learning management system, Canvas, for the upcoming 2017-2018 school year. Currently, the county is in phase 2 of the implementation of Canvas which involves getting more teachers using Canvas before the entire county switches over. CCSD has six instructional technology specialists for the entire county that have divided the 39 schools of all levels into six zones in which they serve. The capstone project will address some of these issues at Creekview High School.

The Cherokee County School District utilizes Bring Your Own Learning Device (BYLD) and one-to-one (1:1) technology depending on what school to allow students access to technology tools. Creekview currently is not part of the 1:1 initiative; however, we do use BYLD along with the computer labs and mobiles that teachers can reserve. Some teachers have 1-3 computers in their classroom. Some of the Career-Technology classes are located in a computer lab. We have a wireless network for the students to connect their personal learning devices to that has a filter that is set by the county. All teachers have issued a laptop. All classrooms are equipped with a SMART Board and printer. Creekview has 1,191 computers and netbooks available (G. Little, personal communication, 2017). With the implementation of Canvas to all

teachers in the 2017-2018 school year, BYLD and reserving computer labs will be important for teachers in order to use Canvas to its fullest ability. Currently, teachers must manually calculate data for each student, review the results, and then assign their differentiated tasks. If teachers use scantrons, teachers can download a program that will load the responses of each student into a file, which helps, but it they still have to review, calculate and assign the follow-up/enrichment tasks individually. Canvas will minimize the time that teachers have to take to differentiate instruction with their students and create a more personalize learning plan for each one.

### **Statement of Problem, Need, and Rationale**

Technology is growing and while teachers want to grow with it and change their classroom to engage and prepare students, it can be cumbersome and time consuming for both the teacher and student. Using technology in the classroom promotes a new shift in instruction for teachers and students that Reigeluth (2016) explains in his article where the teacher's role has changed from the "sage on the stage" to the "guide on the side." Teachers' roles include designer, facilitator, and mentor (Reigeluth, 2016). Students also take on new roles as technology is implemented in the classroom more as worker, self-directed learner, and teacher (Reigeluth, 2016). CCSD will be adopting a new learning management system (LMS) starting in Fall 2017 called Canvas. With this new technology tool, teachers will have better and easier access to student data, which they can create more personalized learning paths for each student. According to Fenton and Murphy (n.d), it is important for educators to hone in on the specific details of the data that is being collected. It is one thing to collectively see that the students did not understand the concepts, but when teachers can see the item analysis of each question and see which students missed that specific questions, they can identify exactly where each student did not understand (Fenton & Murphy, n.d). Canvas gives teachers more opportunities to collect student

data to drive their instructional decisions. However, just because student data is collected does not mean that students will begin to improve their test scores. Fenton and Murphy (n.d) explain that the action that follows the data is what drives the learning process and can create a change in the process.

Currently, if teachers wanted to track data, it would be a cumbersome and time-consuming process as most of the data would need to be tracked manually, which by that point the moment to remediate, differentiate, and engage has passed. Canvas is a tool that will make learning process continuous and on-going. Based on Reigeluth's (2016) research, "technology is designed to evaluate whether or not the criterion was met on each performance and to provide formative feedback to the student immediately for the greatest impact," which is exactly what Canvas can provide for teachers and students (Reigeluth, 2016). In reference to "Evidence-Based Ways to Improve Student Achievement with Hattie & Canvas" (2017), the document states that a method to assist students in learning the material is by providing interventions, where teachers can focus on the students who need remediation. Prior to the use of technology, this method could be difficult to do because of time constraints or would be done with the entire class, but now with Canvas, teachers can use Mastery Paths to target specific students' needs and customize their learning ("Evidence-Based Ways," 2017). Canvas also allows for acceleration in the classroom, where students can work ahead and not be bored by going at a slow pace through using Modules ("Evidence-Based Ways," 2017). Canvas provides teachers with a way to customize the learning process for each student and continue the learning process all through collecting student data in a variety of ways. According to Matuk, Linn, and Eylon (2015), "customization is a process of differentiating instruction, by which teachers modify their instructional strategies, processes, and learning objectives to address their students' specific

needs” (Matuk, Linn, & Eylon, 2015). The ways teachers design their instructional practices will be transformed in Canvas.

In this capstone, teachers will gain skills of these advanced tools that Canvas offers to increase their use of technology in the classroom and increase their test scores. Creekview’s SIP mentions specific goals outlined for teachers to improve in those areas (Merges, 2017). The administration at Creekview has asked for all teachers to review the SIP’s goals and create their own personal goals to be tracked through the Teacher Keys Effectiveness System (TKES).

Through the partnership with the new LMS, Canvas, teachers have a vast amount of data to provide insight into student learning and can help determine remediation, differentiation, and engagement. As these tools are advanced, teachers will need professional development (PD) courses to see the impact that Canvas can have in assisting them to reach their individual teacher goals. This will improve student achievement, the teacher will have solid data to gather their information from, and teachers will meet their TKES and SIP goals. Through the capstone, teachers will learn ways to incorporate Canvas seamlessly into their classroom in a way that is data driven to support their students’ learning at different levels. In the article, “Move Toward Lossless Learning with Connected F2F Technology” (2014), it explains that “Face-to-Face (F2F) static like knowledge gaps, boredom, distraction, or wasted time and effort all interrupt the flow and create a phenomenon called lossy learning” (Move Toward Lossless Learning with Connected F2F Technology, 2014). Canvas is a tool that can be used to diminish the lossless learning through the integration of the features that the learning management system has to offer such as quizzes and learning mastery. “Move Toward Lossless Learning with Connected F2F Technology” (2014) describes how Canvas can “improve the outcomes of F2F instruction by providing more opportunities for students to respond in class, and more efficient ways to find

and eliminate lossiness” (Move Toward Lossless Learning with Connected F2F Technology, 2014). This is a vicious cycle that can prevent the learning process from being meaningful and students can fall behind during this process. Canvas is a way to minimize the lossless learning because it provides the vital information to track student data and engage the students in participating in a multitude of ways. This ability is critical to increasing student achievement across the board, without this knowledge and information that Canvas can provide at a teacher’s fingertips, students continue to have gaps in their learning which causes them to struggle. With the information that Canvas provides, teachers will be able to specifically meet the needs of their students to give them the opportunity to be successful and shift the way that they structure their classroom.

According to Miller (2017), professional development should get the teachers invested and involved in their own learning. PD should allow teachers to still have a voice and choice in how this looks in their classroom. Miller (2017) mentions that the teachers need to set goals for themselves that go along with the over-arching school-wide focus, which in my case, using student data to drive instructional practice all within the LMS of Canvas. During the capstone project, I plan on hosting PD sessions for the teachers at Creekview High School. During the PD, I will address the tools that are built into Canvas such as learning mastery grade book, master paths, student data from quizzes. From the data that the tools provide, I want to provide examples for teachers on how to use this data in their classroom for differentiation, remediation, and enrichment. The teachers at Creekview will attend the training to learn and practice the skills. I will follow up with the teachers after the training to provide support in the classroom, observe them, and help them feel comfortable using these tools in their classroom. I will serve as the instructional technology coach with the current instructional technology specialist that works

with our schools. I believe that by designing the PD and follow-up support, teachers will be able to reach their goals and see the return on investment by attending and implementing believe that this will shift the culture and instructional structure of teacher's classrooms that incorporates and uses technology to their advantage. The principal and district members have granted permission to conduct this capstone project at Creekview High School.

### **Objectives & Deliverables**

Teachers will be participating in professional development classes where they will learn advanced features that Canvas has to offer. Teachers will be instructed on how to use Canvas for formative assessments and work towards implementing them in their classroom more. Teachers will then learn how to differentiate instruction through Mastery Paths, Learning Mastery, and create tiered lessons in modules. By the end of the training, teachers will be able to effectively implement the tools from Canvas into their classroom to improve their teaching strategies and student performance.

**Project Objective:** By November 1, 2017, teachers will increase their use of technology- based formative assessment tools in Canvas by 25%.

### **Deliverables:**

1. Create a needs assessment for teachers on their use of formative assessment tools in Canvas.
2. Create a PowerPoint and script for screencasting an instructional video on Quizzes in Canvas.
3. Create a PowerPoint and script for screencasting an instructional video on Mastery Paths in Canvas.



4. Create a PowerPoint and script for screencasting an instructional video on Learning Mastery in Canvas.
5. Create a PowerPoint and script for screencasting an instructional video on question banks and outcomes in Canvas.

**Project Objective:** By December 1, 2017, teachers will increase the use of effective instructional strategies by using Canvas by 15%.

**Deliverables:**

1. Create a needs assessment for teachers on their use of effective instructional strategies in Canvas.
2. Create a professional development class for teachers to attend to learn effective instructional strategies to use in Canvas.

**Project Objective:** By January 1, 2018, teachers will effectively differentiate instruction by using Canvas.

**Deliverables:**

1. Create a needs assessment for teachers on their use of differentiated strategies in Canvas.
2. Create a professional development class for teachers to attend to learn how to setup multiple tiered lessons using Canvas.
3. Create step-by-step instructions for teachers to have on setting up multiple tiered lessons using Canvas.
4. Develop a list of resources and ideas that teachers can reference for differentiating instruction by using Canvas.

**PSC Standards**

Through the capstone, Standard 2: Teaching, Learning, & Assessment is the PSC standard that is the focus. The project will consist of developing and implementing a professional development course that will allow teachers to use advanced tools within Canvas to track and collect student data to then drive instruction. Each teacher will be provided individual feedback to assist them in their classroom. As the coach, it will allow me to create relationships with the teachers to find the best fit of the tool in their classroom. It will also allow the instruction to be differentiated and tailored the teacher's needs. Through this process, teachers will be observed and data will be collected to track improvement. Teachers will have goals that they are working towards to better their instructional practices by using more student data to drive their methods.

- **Standard 1: Visionary Leadership**- Candidates demonstrate the knowledge, skills, and dispositions to inspire and lead the development and implementation of a shared vision for the effective use of technology to promote excellence and support transformational change throughout the organization.
  - Element 1.1 Shared Vision- Candidates facilitate the development and implementation of a shared vision for the use of technology in teaching, learning, and leadership.
  - Element 1.4 Diffusion of Innovations & Change- Candidates research, recommend, and implement strategies for initiating and sustaining technology innovations and for managing the change process in schools.
- **Standard 2: Teaching, Learning, & Assessment** -Candidates demonstrate the knowledge, skills, and dispositions to effectively integrate technology into their own teaching practice and to collaboratively plan with and assist other educators in utilizing technology to improve teaching, learning, and assessment.

- Element 2.5 Differentiation- Candidates model and facilitate the design and implementation of technology-enhanced learning experiences making appropriate use of differentiation, including adjusting content, process, product, and learning environment based on an analysis of learner characteristics, including readiness levels, interests, and personal goals.
- Element 2.6 Instructional Design- Candidates model and facilitate the effective use of research-based best practices in instructional design when designing and developing digital tools, resources, and technology-enhanced learning experiences.
- Element 2.7 Assessment- Candidates model and facilitate the effective use of diagnostic, formative, and summative assessments to measure student learning and technology literacy, including the use of digital assessment tools and resources.
- Element 2.8 Data Analysis- Candidates model and facilitate the effective use of digital tools and resources to systematically collect and analyze student achievement data, interpret results, communicate findings, and implement appropriate interventions to improve instructional practice and maximize student learning.
- **Standard 5: Professional Learning & Program Evaluation-** Candidates demonstrate the knowledge, skills, and dispositions to conduct needs assessments, develop technology-based professional learning programs, and design and implement regular and rigorous program evaluations to assess effectiveness and impact on student learning.

- Element 5.1 Needs Assessment- Candidates conduct needs assessments to determine school-wide, faculty, grade level, and subject area strengths and weaknesses to inform the content and delivery of technology-based professional learning programs.
- Element 5.2 Professional Learning- Candidates develop and implement technology-based professional learning that aligns to state and national professional learning standards, integrates technology to support face-to-face and online components, models principles of adult learning, and promotes best practices in teaching, learning, and assessment.
- Element 5.3 Program Evaluation- Candidates design and implement program evaluations to determine the overall effectiveness of professional learning on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning.

### **Project Description**

Teachers at Creekview High School will be completing three professional development courses that build upon the advanced tools in Canvas. Within these sessions, the teachers will learn how to take advantage of the student data that Canvas can collect to incorporate into their instructional strategies. Currently, teachers do not have a method to collect student data easily and consistently to inform their instructional practice. Without consistent data being cultivated, students would not get appropriate instruction to remediate, enhance, or differentiate class activities to close the gaps in their education. Canvas uses mastery paths, quizzes, modules, and learning paths to collect data on the student's interactions in the course. This allows for Canvas to keep the learning process ongoing. Teachers will learn how to utilize these tools to produce

effective instructional practices that continue the learning process for the students. The professional development is chunked into three parts that build upon each other. Below in the project timeline, it explains how the course will be created, implemented, and evaluated. After the professional development courses, teachers will be provided follow up support and observations to help guide their practice.

The capstone project begins with a needs assessment survey that the teachers will complete in order to assist in the final stages of the course development. Upon receiving the feedback, the course will be adjusted accordingly. In September, the teachers will start the first phase of the professional development. In this stage, teachers will be learning how to create quizzes and the uses of outcomes and questions banks. Teachers will understand how these items all relate to each other. The outcomes in Canvas are the state aligned standards. Teachers will take these standards and create question banks around each standard. Teachers will need come to the session with questions for some of their standards, so during the work time provided in the professional development they can practice doing this. By creating these questions banks and tying them to the outcomes, teachers will be able to track the student's mastery of the standard. Teachers will then learn how to place the questions that they have created from the bank into the quiz. By starting with this process, teachers will understand where some of the student data is coming from and have the foundation for their quizzes. Without setting up the question banks and outcomes, teachers will not receive complete or accuracy data on their students. Between the professional development sessions, teachers are encouraged to create more question banks with outcomes attached to them. I will be checking in with the teachers via email and face-to-face meetings after the professional development to ensure that they have a firm foundation of this process so they are prepared for the next phase.

In phase two, teachers will attend another professional development session that using the skills from the previous session to build upon. In this course, teachers will learn how to create mastery paths and learning mastery in Canvas. Learning mastery will track the data that is derived from the questions in the question banks. Teachers will learn how to turn on this feature in Canvas within their grade book. The students now will take quizzes that the teacher has created using the question banks with the outcomes. Once the results come in, teachers will be able to go to the learning mastery section in their grade book to see which standard each student struggled with. With this data, teachers can remediate the lesson. Teachers will then learn about mastery paths so they will be able to see how they can use this to remediate, enrich the learning process, and differentiate the process. Mastery paths are determined based on how students did on any graded assignment, so this can be a quiz or an assignment that teachers have created in Canvas. For our professional development, we will just be working with the quizzes. Teachers will see how they can create multiple assignments for a variety of different learning on their own individual mastery path. By creating these mastery paths, students will be able to fill in the gaps of their knowledge. Teachers can also use the quizzes as a pre-assessment to see what the students know. This training will give teachers more student data on each child's learning path to ensure that they are learning the material in a way that best suits them. This professional development will be followed up with checking in to make sure they understand, give them time to ask questions and get assistance in incorporating this into class. I would also conduct observations and more meetings with the teachers to ensure they have the skills to increase their use of technology-based formative assessments in the classroom by the given timeline. By the end of this phase, teachers will increase their use of effective instructional strategies in the classroom.

In the final phase of this process, teachers will have one more professional development course where they will learn instructional strategies that they can use to design their mastery paths around the student data that is being collected and differentiate instruction. At this point, teachers will have the skills to be able to differentiate instruction within Canvas and provide individualized instruction. Teachers will also get more work time to practice and set up their Canvas. Following this phase, teachers will be able to effectively differentiate instruction in the classroom. I will continue to meet, check the progress, and provide support for these teachers through the end of the school year.

Through the entire project, teachers will have the tools in Canvas to improve their instructional strategies based on the derived student data. Teachers will improve their differentiation so that students will have their own learning path that they will complete. I will be able to provide follow-up support to these teachers through the three phases to ensure that they feel comfortable using these new skills in their classroom. Teachers and students should see an improvement in student achievement by incorporating these continuous learning opportunities.

Table 1.

*Project Activities Alignment*

Project Item/Activity	Project Objectives	Deliverable
Create and design a Canvas professional development course.	<p>Create the 1<sup>st</sup> Course- Quizzes and the uses of outcomes and questions banks.</p> <p>Create the 2<sup>nd</sup> Course- Learn how to create mastery paths and learning mastery.</p> <p>Create the 3<sup>rd</sup> Course- Learn instructional strategies that they can use to design their mastery paths around the student data that are being collected and differentiate instruction.</p>	All materials will be uploaded, organized with the learning outcomes and sessions already prepared in Canvas by the end of May.
Have district members review the finished professional development course.	Discuss and outline changes and suggestions to ensure the professional development course.	Changes will be made to the course based on the comments and suggestions made by the district members.
Conduct a needs assessment with the teachers who are taking the course.	Make changes to the course based on the needs assessment.	The survey will be taken into consideration and the course will reflect their input.
Teachers will start the professional development courses and complete all three phases over the course of the school year.	<p>Teachers will learn how to use quizzes, outcomes, and question banks.</p> <p>Teachers will learn how to create mastery paths and learning mastery in Canvas.</p> <p>Teachers will learn instructional strategies that they can use to</p>	<p>After each session, teachers will be provided follow up support via email and face-to-face sessions.</p> <p>Teachers are encouraged to practice these techniques in the classroom and have an observation to</p>



	design their mastery paths around the student data that are being collected and differentiate instruction.	work on these methods that they are learning in the course.
Conduct final assessment with teachers to observe their progress at the end of the professional development sessions.	Teachers will complete the final evaluation of their abilities and comfort levels with the tools they learned in Canvas.	Teachers will show progress through the program and feel comfortable integrating these tools in their classroom.

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### **Evaluation Plan**

Teachers will be learning how to access student data by utilizing the new learning management system, Canvas, to drive and inform their instructional decisions. Through this project, teachers will increase their use of technology-based formative assessment by using Canvas. Specifically, within Canvas, we will utilize learning mastery paths and learn mastery grade book. Teachers will then use the data that they gather to differentiate instruction in Canvas. Ultimately, teachers will increase their use of effective instructional strategies by using Canvas.

Each set of objectives can be measured through The Teacher Keys Effectiveness System (TKES) that administrators will use and with a new rubric related to Canvas. By using TKES, building administrators can evaluate the use of differentiation, instructional strategies, and assessment strategies. There are specific standards that are associated with these areas that can measure the teacher's improvement and teachers have the ability to upload documentation as well.

The other way this project could be evaluated is through the new Canvas evaluation rubric that is currently being developed by our district. This rubric will be written with the same verbiage of the TKES standards to explain how teachers should be using Canvas in their classroom. Administrators will have this rubric to assess teachers on their use of Canvas in a variety of areas including differentiation, instructional strategies, and assessment strategies.

These objectives can be evaluated by showing teachers utilizing specific parts of Canvas in their instructional design through differentiation and formative assessments. Teachers would rank higher if they are able to show how the data that they receive on formative assessments drives individualized learning for students and remediation when needed. Canvas makes this process much easier than it has been before. Teachers have the opportunity to improve their teaching by incorporating Canvas at a deeper level to accomplish these objectives. In the below timeline, methods of evaluation have been described to explain when these checks would be performed and remediated to meet the needs of the individual teacher.

### **Project timeline.**

The project timeline starts in May and extends through the 2017-2018 school year. The beginning of this project will be constructing the Canvas course that the professional development sessions will be going through. The course will include resources that the teachers can reference in their own courses. After the course is developed, it will be sent to the district to revise and edit the course. Once the school year starts, I will conduct my needs assessment and continue to get teachers to sign up for the professional development. The professional development course will take place over three sessions starting in September, again in October, and the last one in January, each followed up with support, feedback, and observations. Through

the course of this project, data on these teachers will be tracked and progress should be able to be seen over time through student scores and TKES evaluations.

Table 2.  
*Project Timeline*

Month	Project item/activity	Hours
May	Develop a course in Canvas to address mastery paths, learning mastery grade book, formative assessments, student data and differentiation, and instructional strategies.	35
June	Meet with and discuss with district members to review, edit, and adjust my course in Canvas.	3
July	Make and adjustments and begin finding and reaching out to teachers to enroll in the course.	5
July	Present course to administration at Creekview and explain the evaluation methods.	3
August	Continue to find teachers to sign up for the professional development course.  Conduct a needs assessment and pre-professional development survey for teachers on their use of formative assessment tools, differentiation, and instructional strategies in Canvas.  Review the needs assessment results and adjust the course accordingly.	10
September	Host professional development course for teachers on formative	6

	assessment strategies such as quizzes, outcomes, and question banks.	
	Provide follow-up support to teachers and check in with them post training.	
October	Host professional development course for teachers on using student data to create mastery paths and opportunities for differentiation.	8
	Provide follow-up support to teachers and check in with them post training. Speak with the administration about the progress of the courses.	
November/December	Visit with each teacher to discuss and assist teachers with implementation of the tools in the classroom.	20
	Conduct observations to drive the meetings with the teachers.	
January	Host professional development course for teachers on tailoring their instructional strategies around using Canvas more to be able to derive more data on students to differentiate learning.	8
	Provide follow-up support for teachers in their classroom.	
February	Meet with administrators to see the progress that teachers have been making since using these strategies that they have learned in the classroom.	10
	Meet with teachers to assess their progress in	

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	implementing these tools and provide support.	
March	Meet with teachers to set up a time to observe and provide feedback to the teachers, speak with the teachers to provide support.	16
April	Conduct final evaluation, including a post-professional development survey, on the growth that teachers had during the duration of these training and meet with the teachers to provide further support and time to practice.	7

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### **Resources**

The course will require the below resources. The Canvas and TKES rubrics are accessible online through the Canvas support including videos. I will compile all images of the video necessary to develop the course. I will reserve space in the media center to host the training and upload the course to the Canvas Commons to ensure that the teachers into the course so that they have access to the materials during and after these sessions. I already own Sony Vegas movie editing software that will allow me to create any necessary videos that Canvas has not already provided.

- Canvas Course
- TKES Rubrics
- Canvas District-wide Rubrics
- Media Center lab for training
- Canvas training videos
- Sony Vegas movie editing software
- Canvas Commons

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## Appendix A

### Pre-PD Survey Questions

1. When do you use student data to guide instructional practices?
  - a. After each formative assessment
  - b. After students take a pre-test and post-test
  - c. I do not collect student data
  - d. At the end of each quiz
2. How do you obtain your student data?
3. What do you believe are the benefits of use student data to drive instruction?
4. Are you using student data to engage, remediate, and differentiate?
  - a. Yes
  - b. No
  - c. Sometimes
5. What are some obstacles that prevent you from collecting and using student data?



**Appendix B****Post PD Survey Questions**

1. How often do you monitor student data?
  - a. Weekly
  - b. Daily
  - c. After tests and quizzes
  - d. I do not monitor student data
  
2. How comfortable do you feel using student data to drive your instruction practices?
  - a. Not comfortable at all
  - b. Somewhat comfortable
  - c. Comfortable
  - d. Very comfortable
  
3. If no, what do you need more assistance with?
  
4. How can I continue to support you in implementing instructional strategies in your classroom?
  
5. On a scale of 1-5, how comfortable are you with designing and using mastery paths in Canvas? 1 = very uncomfortable and 5= very comfortable
  - a. 1
  - b. 2
  - c. 3
  - d. 4
  - e. 5

6. On a scale of 1-5, how comfortable are you with designing and using learning mastery in Canvas? 1 = very uncomfortable and 5= very comfortable
- a. 1
  - b. 2
  - c. 3
  - d. 4
  - e. 5
7. Have you noticed an increase in student achievement since implementing these new tools into your classroom?
- a. Yes
  - b. No
  - c. No, because I have not felt comfortable to implement these new tools into the classroom